

ABSTRACT OF THE DISCLOSURE

The invention relates to a method and a system for receiving an ultra-wideband signal with a self-adapting number of propagation paths. According to the invention, the transmitted signal comprises, over a symbol time T_s , a series of direct successive modulated pulses (ID_{ij0}) which propagate along a direct propagation path and secondary pulses (ID_{ijk} , $k > 0$) which are associated with each direct pulse and which each propagate along a secondary propagation path. The inventive method consists in: receiving (A) the series of direct and secondary pulses on the same receiver circuit; creating (B) a composite correlation pattern $\{MCC_{ijk}\}$ $k = N$, $k = 0$, comprising a series of elementary patterns which are time-shifted in relation to a first elementary correlation pattern; calculating (C) the value of the global correlation coefficient (GCC) between each direct pulse which is associated with the plurality of secondary pulses and the composite correlation pattern, in order to obtain a global correlation value of the symbol, sum of the cross-correlation coefficients of each of the direct and secondary pulses. The invention is suitable for use for UWB radio links for professional or domestic appliances.